



CSE-NMCG Review Meeting

CSE partnership with NMCG in supporting Effective Faecal Sludge and
Septage Management for citywide sanitation

14th August 2020



CSE-NMCG Review Meeting

CSE partnership with NMCG in supporting Effective Faecal Sludge and Septage Management for citywide sanitation



Snapshot of CSE in Ganga Basin...

(2016 - 2018): Capacity Building of State and Non-State Actors in Ganga Basin for **City Sanitation Planning**



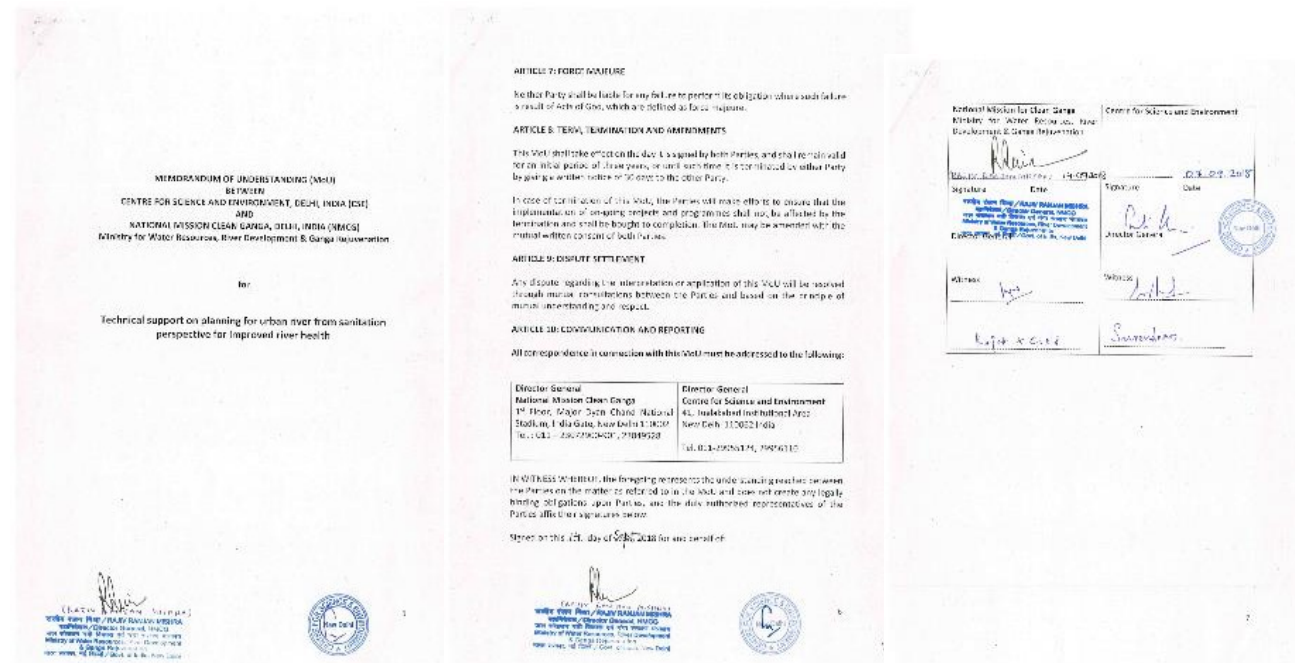
(2018 - 2020): Partnership with NMCG and DoUD UP in Effective **Faecal Sludge and Septage Management** for Citywide Sanitation



CSE & NMCG signed MoU Sept 2018

Core Objective

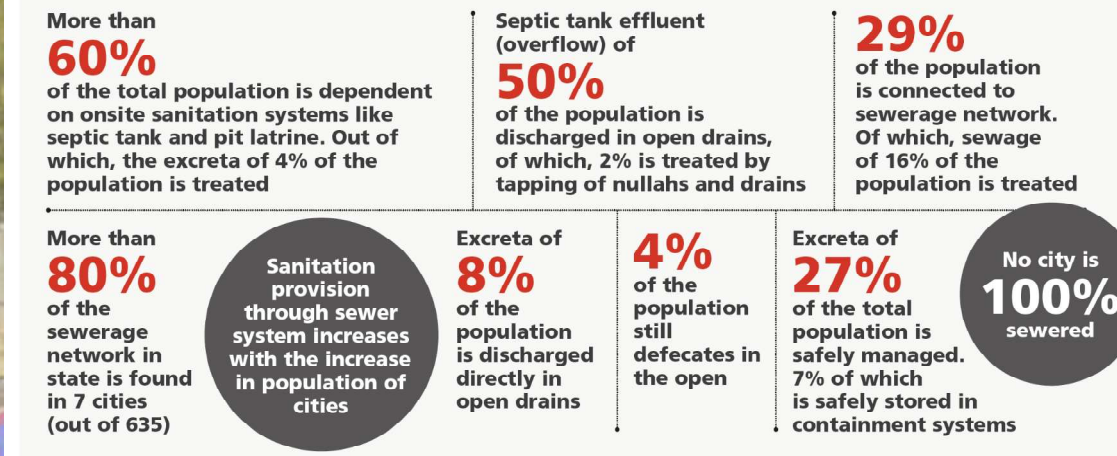
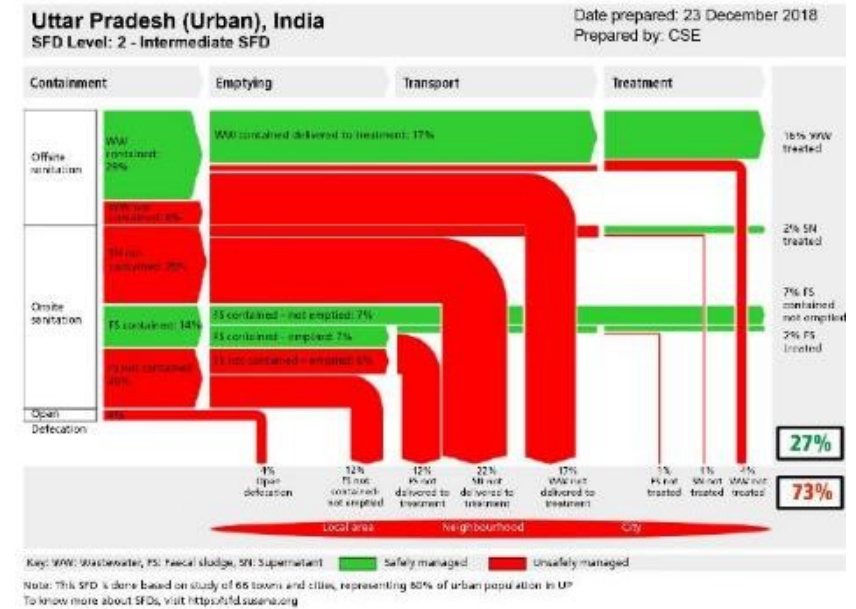
Strengthen capacities of state and city officials to mainstream Faecal Sludge & Septage Management in Ganga Basin through **State Level Programme Support Unit in Lucknow & Delhi** and **City Level Technical Support Unit in Bijnor & Chunar (2 – Deep-dive Cities) & Prayagraj***



Key activities in support of FSSM
for Citywide Sanitation in
Ganga Basin

Assessment of Excreta Management 66 Cities in U.P

- To understand the gaps in sanitation across Ganga basin, Shit Flow Diagram for 66 major cities in the state of Uttar Pradesh are developed
- These SFDs are used to develop the **state level SFD** and **basin level SFD**



*This study is done based on data collected by CSE in October, 2018

ASSESSMENT OF EXCRETA MANAGEMENT
SFD factsheets for 66 cities in Uttar Pradesh

MANAGING SEPTAGE IN CITIES OF UTTAR PRADESH
An analysis of the sanitation chain in 66 cities, through SFDs

Online Tools to support Citywide Sanitation

SANi-KiT
PREPARING A CITY SANITATION PLAN

A web-based tool for preparing city sanitation plans



MOUNT is an online aggregator platform disseminating knowledge on sustainable technologies and good practices for wastewater and faecal sludge management.

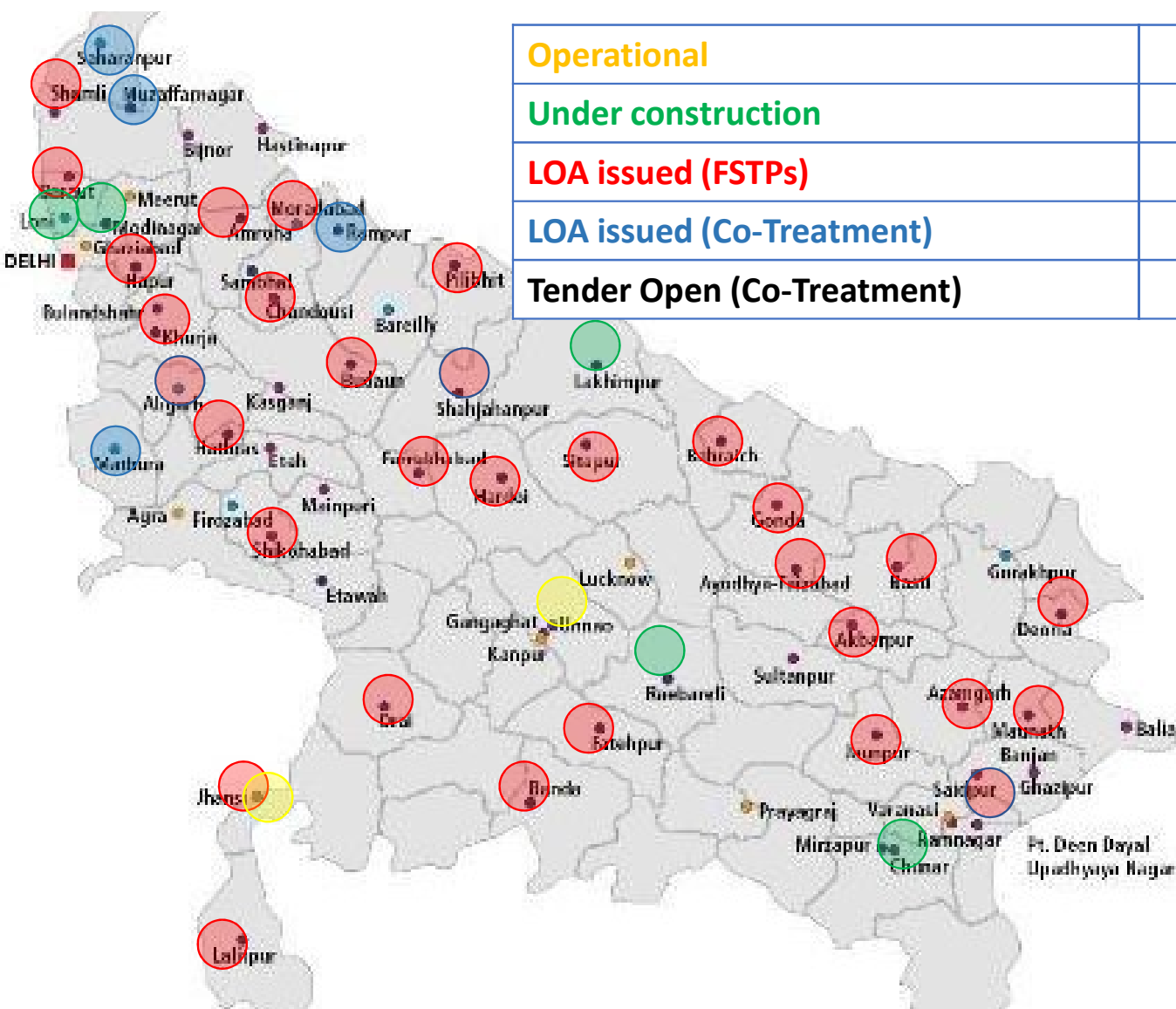


Snapshot of FSSM Progress

2019-20

- **Operationalized FSTP in Jhansi and Unnao (October 2019)**
- FSTP implementation Status
 - **Under Construction**
 - AMRUT: 4 cities (*Lakhimpur, Raebareli, Loni, Modinagar*)
 - **Namami Gange: 1 city (Chunar) – CSE Knowledge Partner**
 - **Contractor selected for FSTPs: 31 (Cities)**
 - **Contractor selected for Co-Treatment: 4 (Cities)**
 - **Tenders under evaluation of Co-Treatment: 17 (Cities)**
- **Septage Management policy operationalized in Oct 2019.**
- **Several city have started registration and licensing of De-sludgers for decanting faecal sludge at Sewage Pumping Station / Sewage Treatment Plant.**
- **City level FSSM Bye-laws approved in Bijnor, Chunar, Jhansi.**
- **CSE city-level FSSM guidelines approved by Chunar City Council.**

Tracking FSTP progress in U.P.



Operational	2
Under construction	5
LOA issued (FSTPs)	31
LOA issued (Co-Treatment)	4
Tender Open (Co-Treatment)	17

Name of City	Status
Jhansi, Unnao	Operational
Loni, Lakhimpur, Rae Bareilly, Chunar, Modinagar	construction started
Aligarh, Moradabad, Shahjahanpur, Ayodhya, Pilibhit, Pt. Deen Dayal Upadhyay Nagar, Shamli, Baraut, Hapur, Khurja, Chandousi, Hathras, Amroha, Budaun, Shikohabad, Farrukhabad, Hardoi, Sitapur, Bahraich, Gonda, Orai, Jhansi, Lalitpur, Banda, Fatehpur, Akhbarpur, Basti, Deoria, Azamgarh, Juanpur, Maunath Bhanjan.	Letter of Award Issued : FSTP
Saharanpur, Mathura, Rampur, Muzaffarnagar	Letter of Award Issued : Co-Treatment in STP
Lucknow, Kanpur, Agra, Meerut, Varanasi, Allahabad, Ghaziabad, Gorakhpur, Etawah, Mirzapur, Firozabad, Mainpuri, Sultanpur, Ballia, Bulandshahr, Ghazipur, Ayodhya-Faizabad.	Tenders floated (Co-Treatment):

TECHNICAL SUPPORT UNIT (Focus City (1)- Bijnor)

Planned (April'19)	Status (June'20)
Training on designing of containment systems for masons/plumbers	Training conducted from 16 th Jan to 18 th 2020, model septic tank and twin pit constructed by the trained masons.
City to develop FSSM bye-laws and enforcement mechanisms for containment systems	City FSSM Bye-laws is approved by the board, will get notified in next meeting. Notification got delayed due to Covid-19 Pandemic
Capacitate truck operators or de sludgers to ensure that they decant the collected sludge in designated treatment sites	City-level training conducted to capacitate private emptiers plying in the city from 14-15 October 2019
Provide technical support in setting up Model Fecal Sludge Treatment Plant (FSTP)	Feasibility study for Co-Treatment done , draft DPR ready. Land for co-composting procured.
Conduct City Sanitation Task Force (CSTF) meeting on a rolling basis to ensure the ongoing effectiveness and efficiency in the project's implementation	Conducted virtual CSTF Meeting on 26 th May'20. More meetings planned for the coming year.
	Training of sanitary workers, provision of PPE, Covid awareness week- painting competition, slogan writing competition, social media campaign, wall paintings in low income settlements



TECHNICAL SUPPORT UNIT (Focus City (2)- Chunar)

Planned (April'19)	Status (June'20)
Set up technical support unit	CSE representative stationed at Chunar closely supporting nagar palika parishad
Provide technical support in implementation of faecal sludge treatment plant	FSTP under construction , project running behind schedule due to hindrances caused by the pandemic.
Training on designing of containment systems for masons/plumbers	Training conducted from 21 st Jan to 23 rd Jan 2020, model septic tank and twin pit constructed by the trained masons.
Technical Support for Trenching for temporary Faecal Sludge disposal	Temporary trenching site is up and running and will cater to disposal of faecal sludge till the time FSTP is up and running
Capacitate truck operators or de sludgers to ensure that they decant the collected sludge in designated treatment sites	City-level training conducted to capacitate private emptiers plying in the city from 14-15 October 2019
Conduct City Sanitation Task Force (CSTF) meeting on a rolling basis to ensure the ongoing effectiveness and efficiency in the project's implementation	Conducted virtual CSTF Meeting on 26 th May'20. More meetings planned for the coming year.
	Training of sanitary workers, provision of PPE, Covid awareness week- painting competition, slogan writing competition, social media campaign, wall paintings in low income settlements



Feasibility study for Pilot FSTP in Focus City (3) (Prayagraj)

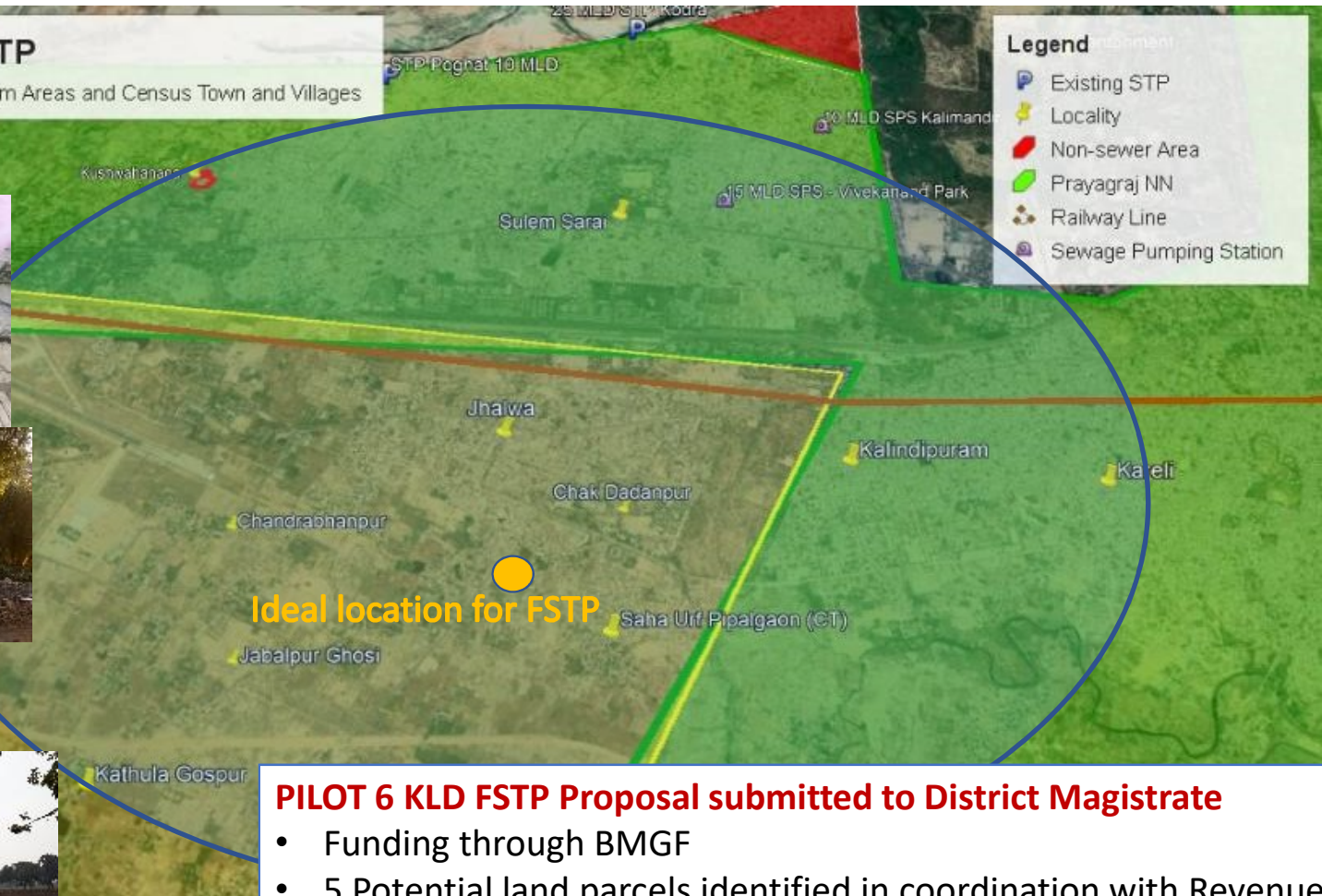
Cluster for FSTP

Non-sewered Nagar Nigam Areas and Census Town and Villages

Field visits to targeted areas



FSTP Site Identification in progress



PILOT 6 KLD FSTP Proposal submitted to District Magistrate

- Funding through BMGF
- 5 Potential land parcels identified in coordination with Revenue Department.
- Land finalization in progress before COVID-19 lockdown

CSE's Faecal Sludge Testing Lab

**A state-of-art, referral monitoring laboratory for testing wastewater and faecal sludge.
Operational for 1.5 years**

Support in lab testing of operationalized FSTPs including FSTP in Unnao, Jhansi and Co-Treatment of FS in STP in Bharwara (Lucknow) – (as per of Lab Study evaluating FSTP performance across India)



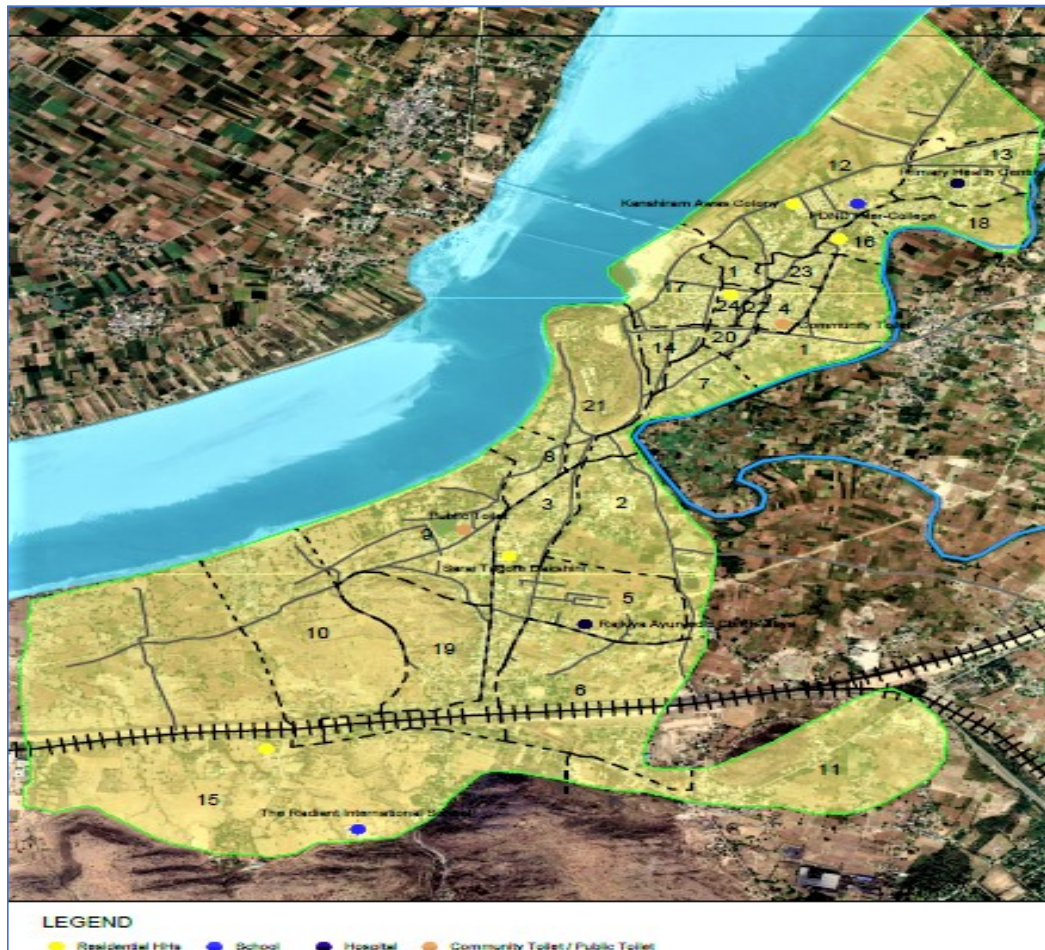
Hands-on training in Helminth testing
(Advanced Lab trainings in FSSM)



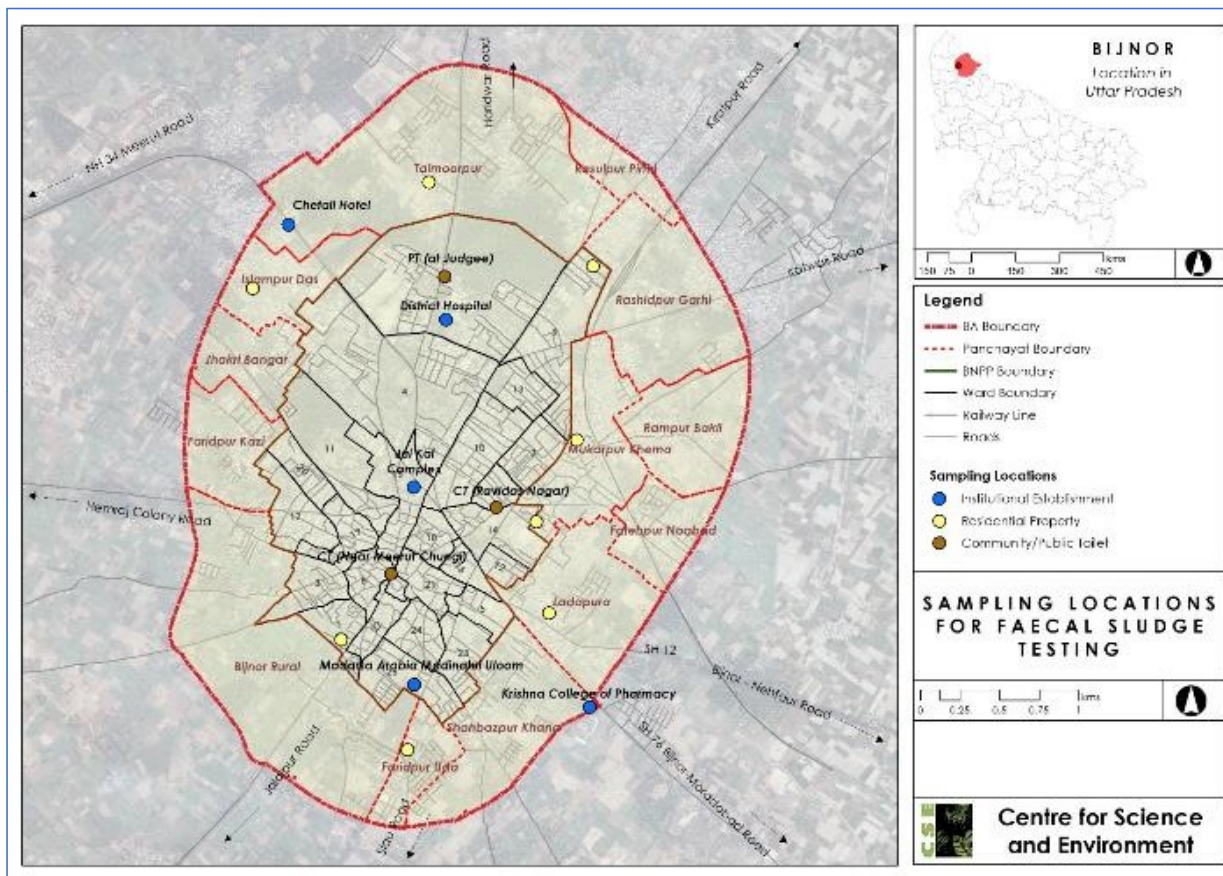
*CSE lab testing at Unnao FSTP; operationalized
since Oct 2019 (1st through AMRUT)*



Characterization of faecal sludge & septage in Chunar City



Characterization of faecal sludge and septage in Bijnor City



Test Results

Chunar

TEST REPORT FORM

Date: Feb 4th, 2019

Report ID: CSE/AAETI/EML/TRF/45

CSE Team Participating	Water Team & FSM Lab
Sample Identity	Sludge Samples from township of Chunar, UP
Number of samples	7 (From Chunar) + 1 (Composite sample prepared in Lab)
Samples collected/delivered by	Self-Collected
Date of sample submission at AAETI	Jan 18 th , 2019

Result of Physico-chemical and Microbiological parameters in Fecal Sludge samples

S No	Sample Location	pH ± Error % (95% C.I.)	Moisture Content %	TS ± Error % (95% C.I.) (ppm)	COD ± Error % (95% C.I.) (ppm)	BOD ₅ (5 days at 20°C) (ppm)	TKN ± Error % (95% C.I.) (ppm)	Ammoniacal N ± Error % (95% C.I.) (ppm)	Total Phosphate ± Error % (95% C.I.) (ppm)	Fecal coliform (MPN/100 ml)	Calorific Value (cal/g)
1.	PHC-C	6.8 ± 0.2%	96.6	40,400 ± 0.8%	71,700 ± 0.5%	3,790	1204 ± 2.4%	101.9 ± 0.5%	295.0 ± 2.8%	3.6x10 ⁵	2709.0
2.	JKC-C1	6.6 ± 0.2%	96.7	32,160 ± 0.8%	67,950 ± 0.5%	5,800	1162 ± 2.4%	126.6 ± 0.5%	304.0 ± 2.8%	3.6x10 ⁴	3200.1
3.	KAW-C	6.2 ± 0.2%	94.8	30,500 ± 0.8%	72,300 ± 0.5%	5,610	1064 ± 2.4%	110.9 ± 0.5%	182.0 ± 2.8%	4.3x10 ⁵	3892.5
4.	TIT-C	6.5 ± 0.2%	98.1	38,020 ± 0.8%	83,400 ± 0.5%	5,930	1666 ± 2.4%	218.4 ± 0.5%	338.0 ± 2.8%	3.6x10 ⁵	3887.9
5.	CT-C	6.8 ± 0.2%	95.0	60,960 ± 0.8%	100,800 ± 0.5%	3,730	1862 ± 2.4%	304.6 ± 0.5%	524.0 ± 2.8%	2.3x10 ⁶	2779.7
6.	PTD-C	6.6 ± 0.2%	99.1	17,360 ± 0.8%	31,800 ± 0.5%	2,960	798 ± 2.4%	138.9 ± 0.5%	178.0 ± 2.8%	3.6x10 ⁴	2784.1
7.	RIS-C	6.5 ± 0.2%	96.3	31,000 ± 0.8%	53,100 ± 0.5%	3,260	1106 ± 2.4%	149.0 ± 0.5%	319.0 ± 2.8%	3.6x10 ⁴	2614.8
8.	COM-C	6.6 ± 0.2%	96.7	44,960 ± 0.8%	59,400 ± 0.5%		1266 ± 2.4%	164.3 ± 0.5%	305.7 ± 2.8%		3124.0

Bijnor

Environment Monitoring Laboratory
A unit of Centre for Science and Environment
Anil Agarwal Environment Training Institute
Nimbi, District Alwar, Rajasthan-301019

EML Form No.: 4

TEST REPORT FORM

Date: Mar 2nd, 2019
Report ID –EML/TRF/046

CSE Team Participating	Water Team & FSM Lab
Sample Identity	Sludge Samples from Bijnor, UP
Number of samples	11 (From Bijnor) + 1 (Composite sample prepared in Lab)
Samples collected/delivered by	Self-Collected
Date of sample submission at AAETI	Feb 8 th , 2019

Result of Physico-chemical and Microbiological parameters in Fecal Sludge samples

S No	Sample Location	pH ± Error % (95% C.I.)	Moisture Content %	TS ± Error % (95% C.I.) (ppm)	COD ± Error % (95% C.I.) (ppm)	BOD ₅ (5 days at 20°C) (ppm)	TKN ± Error % (95% C.I.) (ppm)	Ammoniacal N ± Error % (95% C.I.) (ppm)	Total Phosphate ± Error % (95% C.I.) (ppm)	Fecal coliform (MPN/100 ml)	Calorific Value (cal/g)
1.	HCT-B	6.5 ± 0.2%	98.1	50,328 ± 0.8%	32,600 ± 0.5%	4,280	851.2 ± 2.4%	164.6 ± 0.5%	166.0 ± 2.8%	1.2 x 10 ⁷	3424.0
2.	RCR-B	7.2 ± 0.2%	99.2	25,360 ± 0.8%	20,550 ± 0.5%	1,380	862.4 ± 2.4%	236.3 ± 0.5%	221.0 ± 2.8%	5.6 x 10 ⁵	3950.5
3.	HMK-B	6.5 ± 0.2%	84.3	118,648 ± 0.8%	120,100 ± 0.5%	5,430	3080.0 ± 2.4%	116.5 ± 0.5%	656.0 ± 2.8%	1.5 x 10 ⁶	2768.6
4.	HWV-B	7.3 ± 0.2%	96.7	31,398 ± 0.8%	35,900 ± 0.5%	4,630	1013.6 ± 2.4%	136.6 ± 0.5%	262.0 ± 2.8%	2.3 x 10 ⁵	3534.0
5.	JLP-B	7.5 ± 0.2%	93.0	34,388 ± 0.8%	26,900 ± 0.5%	2,420	806.4 ± 2.4%	177.0 ± 0.5%	238.5 ± 2.8%	1.5 x 10 ⁵	2696.1
6.	KCS-B	7.2 ± 0.2%	99.4	1,278 ± 3.1%	1,040 ± 1.7%	870	126.0 ± 2.4%	67.2 ± 0.5%	24.5 ± 2.8%	9.2 x 10 ⁴	2276.7
7.	HFU-B	6.8 ± 0.2%	94.2	42,264 ± 0.8%	45,550 ± 0.5%	1,640	1428.0 ± 2.4%	227.4 ± 0.5%	458.0 ± 2.8%	2.3 x 10 ⁵	3264.9
8.	CTR-B	6.9 ± 0.2%	99.2	2,638 ± 3.1%	6,200 ± 0.5%	630	210.0 ± 2.4%	82.9 ± 0.5%	56.5 ± 2.8%	4.3 x 10 ⁵	2813.5
9.	DHR-B	7.4 ± 0.2%	98.9	9,766 ± 0.8%	16,200 ± 0.5%	1258	571.2 ± 2.4%	168.0 ± 0.5%	131.0 ± 2.8%	2.3 x 10 ⁵	3643.6
10.	DMR-B	7.8 ± 0.2%	93.4	79,622 ± 0.8%	71,950 ± 0.5%	3850	2329.6 ± 2.4%	169.1 ± 0.5%	738.0 ± 2.8%	1.1 x 10 ⁷	2364.1
11.	AVI-B	7.5 ± 0.2%	96.4	41,424 ± 0.8%	49,300 ± 0.5%	3010	1584.8 ± 2.4%	278.9 ± 0.5%	333.0 ± 2.8%	1.2 x 10 ⁷	2815.7

Faecal Sludge Treatment Plant in Chunar

Capacity: 10 KLD

Area: 3797 sqm. + 1742 sqm. (for plantation)

Capital Cost: INR 195.9 Lakhs

Funding by: Namami Gange

Implementing Agency: UP Jal Nigam

Contractor Name: ELEFO Biotech Private Limited

Trenching for temporary FS disposal



Status of FSTP construction in Chunar

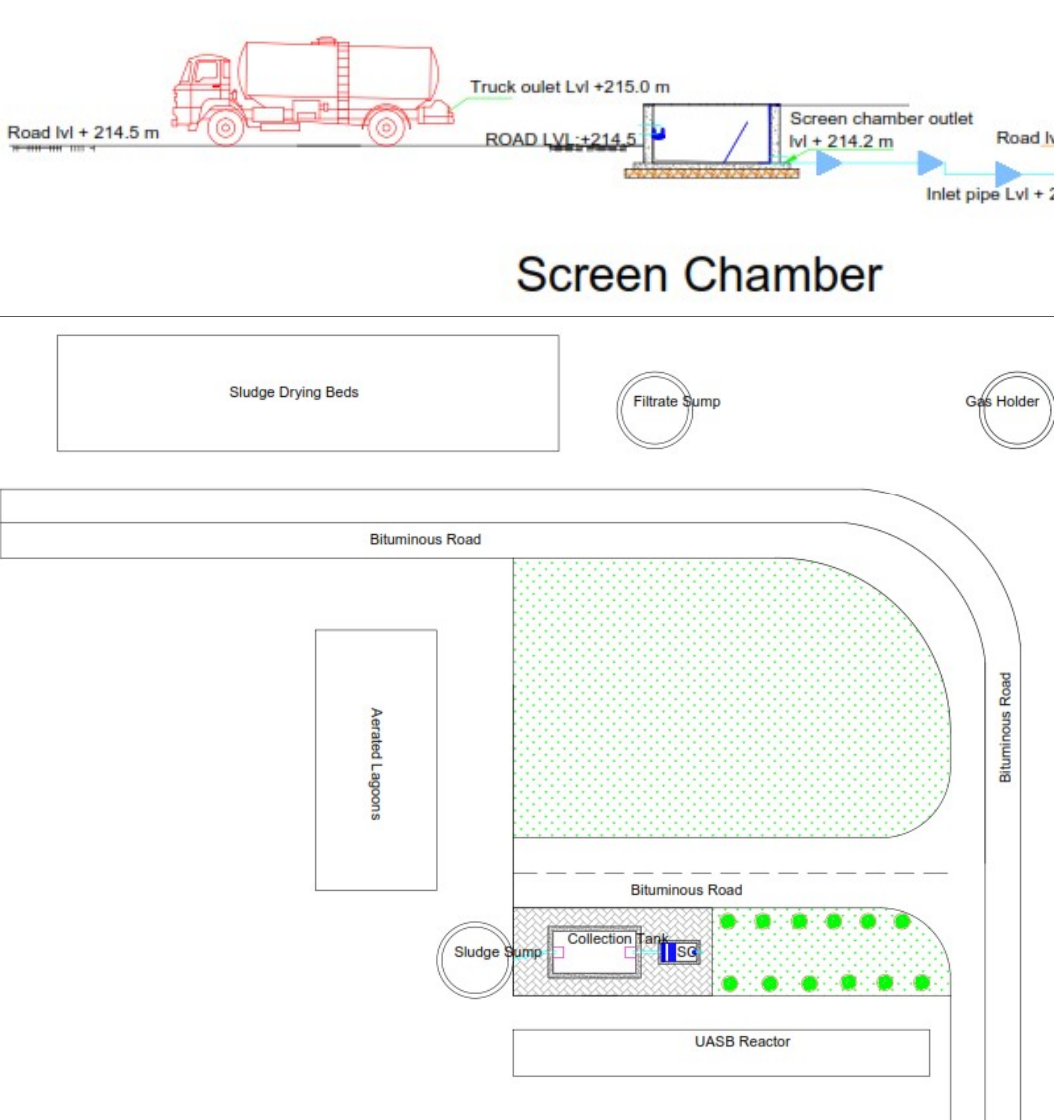
- Tentative completion date: Oct'20
- ~38% work completed



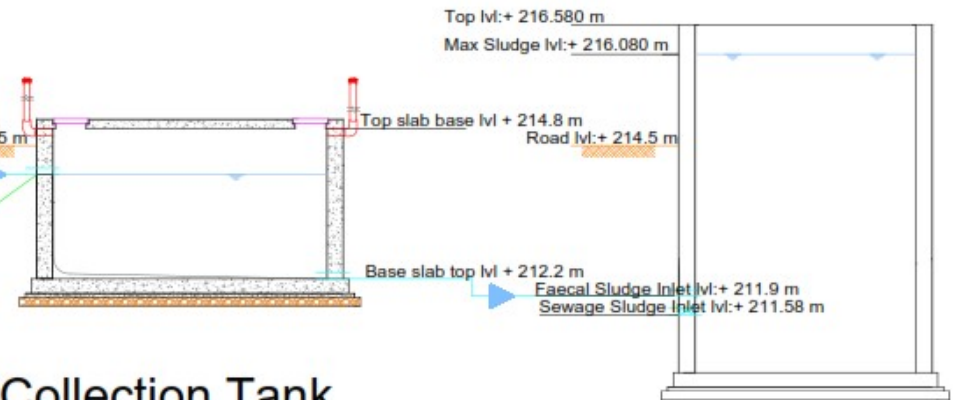
Physical progress of FSTP in Chunar

Sl	Work Description	Progress
1	Technical modules	
1.01	Screening chamber	-
1.02	Planted drying bed	15%
1.03	Integrated settler & anaerobic filter	-
1.04	Planted gravel filter	-
1.05	Integrated Collection Tank, Dual Media Filter, Activated Carbon Filter, UV Disinfection Unit	-
2	Other civil, electrical and mechanical works	
2.01	Site preparation	50%
2.02	Storm water drain	-
2.03	Operator room	-
2.04	Toilets	70%
2.05	Office room	70%
2.06	Sludge storage yard	-
2.07	Flexible pavement	-
2.08	Boundary wall	60%
2.09	Cutting & stone pitching work	-
2.10	Retaining wall	-
2.11	Registers	-
2.12	Culvert	-
2.13	Additional works	-
2.14	Tools list	-
3	Additional expenses	
3.01	Access road connecting site to the existing main road	-
3.02	Plantation site showcasing reuse of by-products	-

Co-treatment proposed at Bijnor STP



Screen Chamber



Collection Tank

Sewage Sludge Sump Well



CSE as part of the technical support to Bijnor Nagar Palika Parishad has developed a DPR on extra modules required for receiving faecal sludge at the STP in Bijnor for Co-treatment.

Regular City Sanitation Task Force Meetings

Based on the process training conducted by CSE, a CSTF was constituted in Bijnor and Chunar to develop and implement a city sanitation plan/city FSSM guidelines through stakeholder approach. The CSTF actively meets and take informed decisions with respect to sanitation in the cities.



CITY SANITATION TASK FORCE

BIJNOR NAGAR PALIKA PARISHAD

STAKEHOLDERS

 Medical Representative

 Political Representative

 Administrative Staff

 Technical Stakeholders

 CSE Technical Support Unit

 Media Representative

 Social Worker or NGO

 Youth worker



Mrs. Raksha Parveen
Chairman, BNPP



Durgeshwar Kumar Tripathi
Executive Officer, BNPP



Mr. Shamsud Ahmed Ansari
Political and Social Worker, BNPP



Mr. Anil Goutam
Junior Engineer, Jd Kd, BNPP



Mr. Vishwanath Kumar
Junior Engineer, Civil, BNPP



Mr. Gaurav Singh Choudhary
Sanitation and Food Inspector, BNPP



Ms. Sandhya Bhatnagar
Charitable Trust, Bijnor



Mr. Wasim Akhtar
Reporter, Doo News, Bijnor



Mr. Jayalal Sharma
Senior Pharmacist, Bijayimex, Bijayimex



Mr. Wasim Akram
Assistant Engineer, BNPP



Mr. Mohd. Vikram Singh
Assistant Engineer, UP, Jd, Agam, Bijnor



Dr. Shalish Jais
Assistant Chief Medical Officer, CMO, Bijnor



Harsh Yadav
Research Associate, Chaudhary, CSE





CITY SANITATION TASK FORCE

NAGAR PALIKA PARISHAD CHUNAR

STAKEHOLDERS

 Academic/Researcher

 Medical Representative

 Political Representative

 Administrative Staff

 Technical Stakeholders

 CSE Technical Support Unit

 Social Worker or NGO

 Helping hand



Dr. Shalish Jais
Assistant Chief Medical Officer, BNPP



Mr. Wasim Akhtar
Reporter, Doo News, Bijnor



Mr. Shamsud Ahmed Ansari
Political and Social Worker, BNPP



Mr. Anil Goutam
Junior Engineer, Jd Kd, BNPP



Mr. Vishwanath Kumar
Junior Engineer, Civil, BNPP



Mr. Gaurav Singh Choudhary
Sanitation and Food Inspector, BNPP



Ms. Sandhya Bhatnagar
Charitable Trust, Bijnor



Mr. Wasim Akram
Assistant Engineer, BNPP



Mr. Jayalal Sharma
Senior Pharmacist, Bijayimex, Bijayimex



Mr. Mohd. Vikram Singh
Assistant Engineer, UP, Jd, Agam, Bijnor



Dr. Shalish Jais
Assistant Chief Medical Officer, CMO, Bijnor



Harsh Yadav
Research Associate, Chaudhary, CSE

Research & Technical Feasibility Support : 2019- 2020



SFD Report

Bijnor
India

Final Report

This SFD Report - Comprehensive work - was prepared by Centre for Science and Environment (CSE)

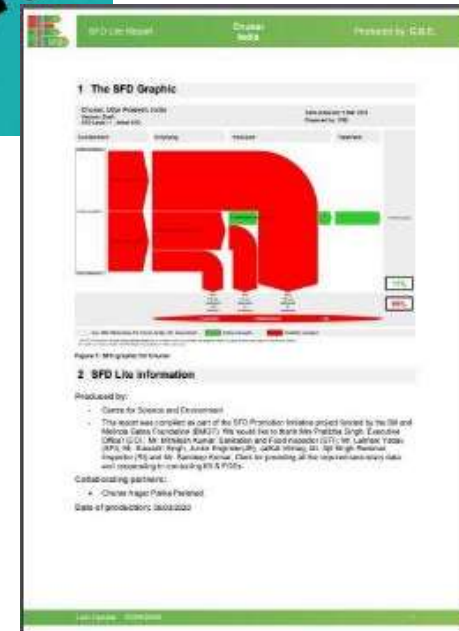
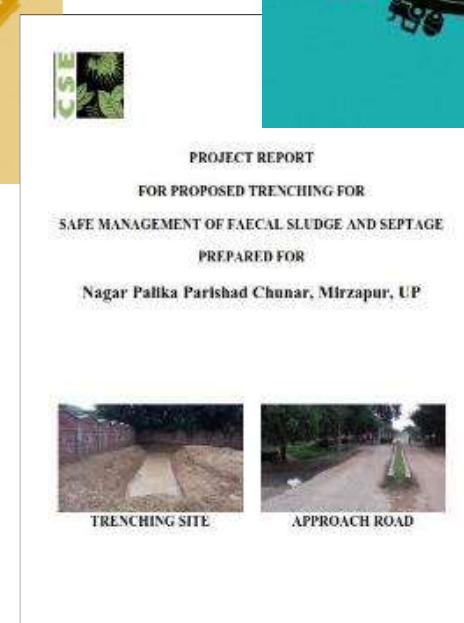
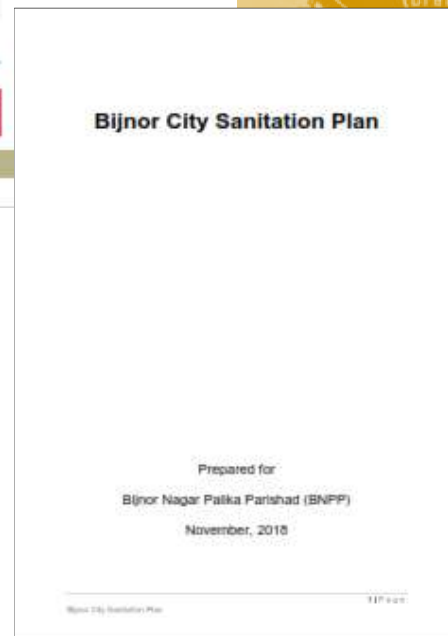
Date of production: 27/04/2017
Last update: 03/04/2018

100% Renewable Initiative

sustainable sanitation alliance

glz

at the heart of
the sustainable sanitation
alliance



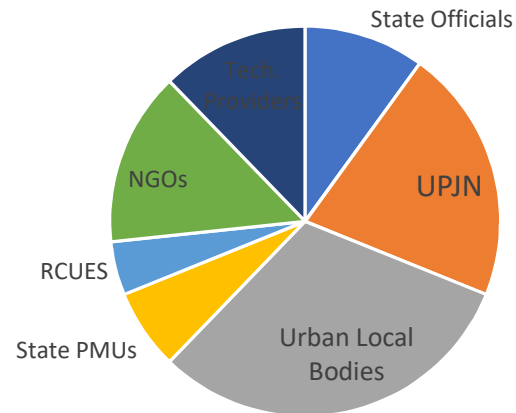
Workshops, Trainings and Exposure Visits

35 officials from NMCG / SMCGs have been part of several capacity building initiatives

State Workshop FSSM in Lucknow Oct'18



Total Participation - 78



Key Note Speakers

Shri Manoj Kumar Singh	PS, DoUD
Ms Sunita Narain	DG, CSE
Shri G S Priyadarshi	SMD, AMRUT
Ms Madhu Krishna	Country Lead, BMGF

Guest Speakers / Resource Persons

CEO WaterAid India, Rep. WaterAid Bangladesh, IWMI Sri Lanka, Technology Providers in FSSM, Remote session: IWK, Malaysia, BWD, Philippines, Rep. ASCI – supporting A.P.

Launch of Reports & Tools



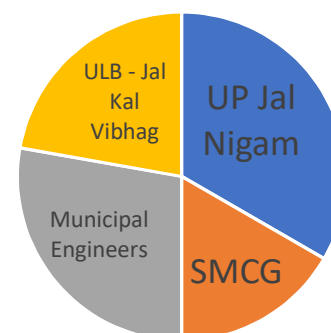
SANi-KiT
PREPARING A CITY SANITATION PLAN



Training Programme on Effective FSSM for Mainstreaming Citywide Sanitation

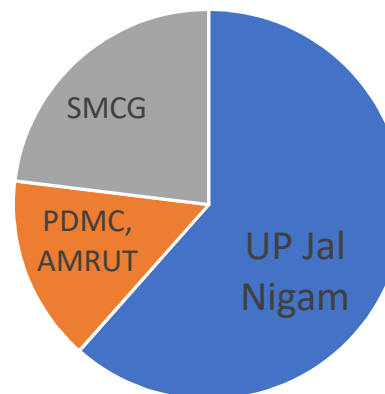


1) 29-31 May'18 Training on FSSM at AAETI (Rajasthan campus) 16 U.P. Participants



UPJN	6 - Kanpur, Lucknow, Agra, Etawah, Aligarh
Municipal Engineer	3 – Ramnagar, Fatehpur, Ballia,
Jal Kal	4 – Kanpur, Varanasi, Allahabad, Mirzapur
SMCG	3

2) Dec'18 Training on FSSM in Lucknow 13 Participants



UPJN	8 No. (Unnao, Loni, Etawah, Bahraich, Luck.)
PDMC, AMRUT	2 No.
SMCG	3 No.



Cross Learning Exposure Visit to Odisha (19-20 Dec'18)



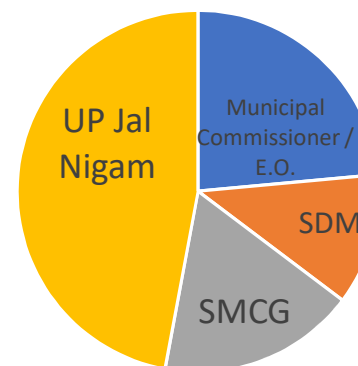
Field Visit

- FSTP in Bhubaneswar
- Co-Treatment of FS in Puri

Knowledge sharing Sessions:

- Project Director, OWSSB
- Team Leader, State PMU

Distribution of 17 participants



SDM	2 No. (Mirzapur, Bijnor)
Municipal Com. / E.O.	4 No. (Mathura, Jhansi, Bijnor & Chunar)
UPJN	8 No. (Unnao, Loni, Ettawah, Bahraich, Luck.)
SMCG	3 No.



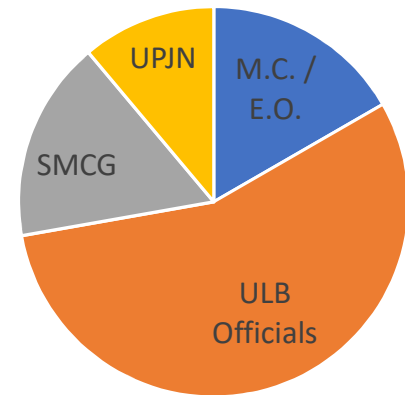
International Knowledge Conclave: SFD Week (2-5 April 2019)



Key Note Speakers:

- Durga Shankar Mishra, Sec, MoHUA
- Rajiv Ranjan Mishra, DG, NMCG
- Kala Vairavamoorthy, ED, IWA
- Dhesigen Naidoo, CEO, WRC
- Stefan Reuters, Director, BORDA
- Arne Panesar, Head of Prog., GIZ
- Madhu Krishna, Country Lead, BMGF
- Sunita Narain, DG, CSE

U.P. Participation - 18



**Experts from
Water Research
Commission (S. A.),
Columbia University (USA),
Lancaster University (U.K),
IIT Kharagpur as well as
practitioners from Ghana,
Senegal, South Africa, USA
& Malaysia**



Training cum Exposure Visit to FSTPs in Odisha for FSSM July 2019

- The training target 20+ engineers from UP Jal Nigam, NMCG involved in FSTP implementation.
- Field visit to Faecal Sludge Treatment Plants in Odisha.
- **Master trainers with FSSM experience from Malaysia and Philippines.**



International Exposure Visits: FSSM

As part of BMGF funded initiative 'Multi-Country Twinning Programme: FSSM Knowledge Exchange'



U.P. officials

1) Mr U.K. Tayal (PDMC, AMRUT)	Philippines
2) Mr Arun Kumar Tyagi, UP Jal Nigam (Bijnor)	Malaysia & Thailand
3) Mr Ashutosh Kumar Yadav, AE, UPJN, Ghaziabad	Indonesia
4) Mr S. K. Gupta, GM (GPCU), UP Jal Nigam, Lucknow	Malaysia
5) Mr Akanshu Singh, AE, UPJN, Ghaziabad	Malaysia

NMCG officials

1) Mr Rupesh Srivastava, Director Projects, NMCG	Philippines
2) Nidhi Dwivedi, Project Officer (Technical), NMCG (Nodal Officer U.P.)	Malaysia

International Training cum Exposure Visits: FSSM in Bangladesh

8-12 February 2020

‘Knowledge sharing between participants from Bangladesh, Nepal and India’



U.P. participants supported by CSE

1) Shri Shiv Pujan Yadav	Addl. Commissioner attached to Directorate of Local Bodies. U.P.
2) Shri Durgeswar Tripathi	Executive Officer, Bijnor Nagar Nigam
3) Shri Anand Kumar Dubey	Project Manager, GPCU, Prayagraj, U P Jal Nigam
4) Shri Afzal Khan	Project Manager, GPCU, Mirzapur, U P Jal Nigam
5) Sudhansu Kumar	Project Engineer, GPCU, Lucknow, U P Jal Nigam
6) Shri Mohit Vikram Singh	Assistant Engineer, Bijnor, U P Jal Nigam

NMCG Officials supported by CSE

1) Shri Saumyasib Mukhopadhyay	Senior Environmental Specialist, NMCG
2) Shri Vijay Kumar Yadav	Assistant Civil Engineer, NMCG

City Level Trainings on Mainstreaming FSSM

Training on Emptying and Transportation of Faecal Sludge and Septage



Training programme on Designing Onsite Sanitation Systems for masons in Bijnor & Chunar



- Around 20 masons trained in both the cities of Bijnor and Chunar on designing of Onsite Sanitation Systems
- Around 22 private desludgers of Lucknow, Bijnor & Chunar & 8 zonal officials were trained on safe emptying transportation of faecal sludge & septage.

Webinar on FSSM

22nd July 2020



Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation

गंगा

WEBINAR ON

MAINSTREAMING FAECAL SLUDGE AND SEPTAGE MANAGEMENT IN GANGA BASIN

To achieve citywide sanitation for River Pollution Abatement

Date: 22nd July 2020 Time: 14:30- 16:00 hrs Venue: Online | Google Meet link: <https://meet.google.com/cky-utuc-osh>

National Mission for Clean Ganga (NMCG) is organizing a virtual meeting on Mainstreaming Faecal Sludge and Septage Management in Ganga Basin to achieve Citywide Sanitation for river pollution abatement.

MEET THE SPEAKERS



Shri Upendra Prasad Singh (IAS)
Secretary
Ministry of Jal Shakti
DoWR, RD&GR



Shri Rajiv Ranjan Mishra (IAS)
Director General
National Mission for Clean Ganga



Shri G. Mathi Vathanan (IAS)
Principal Secretary,
DH&UD, Odisha



Ms Sunita Narain
Director General,
Centre for Science & Environment



Dr Suresh Rohilla
Senior Director
Centre for Science & Environment

AGENDA

Time	Topic
14:30-14:40	Keynote Address Shri Rajiv Ranjan Mishra (IAS) Director General, National Mission for Clean Ganga
14:40-15:00	Mainstreaming FSSM in Odisha- Experience sharing Shri G. Mathi Vathanan (IAS) Principal Secretary, Department of Housing and Urban Development, Odisha
15:00-15:20	Excreta Management and effective FSSM for river pollution abatement Ms Sunita Narain Director General, Centre for Science and Environment
15:20-15:30	Brief on SFD Phase 3 Dr Suresh Kumar Rohilla Senior Director, Centre for Science and Environment Launch of SFD Phase 3 - CSE initiative on 'Preparation of SFDs for mainstreaming effective FSSM in Ganga basin states/ cities' by Secretary, MoJS & DG NMCG
15:30-15:40	Question and Answer
15:40-16:00	Concluding Remarks Shri U.P. Singh (IAS) Secretary, Ministry of Jal Shakti

More than 300 participants from all over the country attended the webinar jointly organised by NMCG and CSE. SFD-3 was also launched in this meeting.



Supporting COVID-19 response in Uttar Pradesh

Key Activities

COVID-19 support in Uttar Pradesh

Phase-1: Support to Bijnor and Chunar

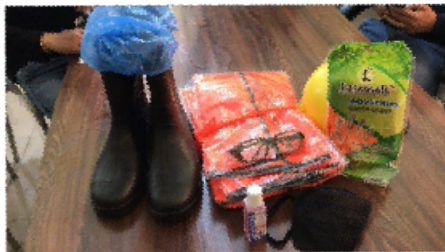
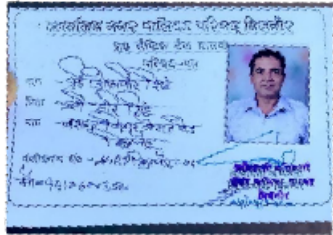
- 440 sets of personal protective gear
- 4 Thermal Scanner
- IEC campaign relating to good practices during COVID-19 with messaging in Hindi and Urdu
- 4 Foot operated hand wash stations

Phase-2 : Support to additional 6 cities

- 1250 sets of personal protective gear
- 12 thermal scanners
- 6 Foot operated hand wash stations



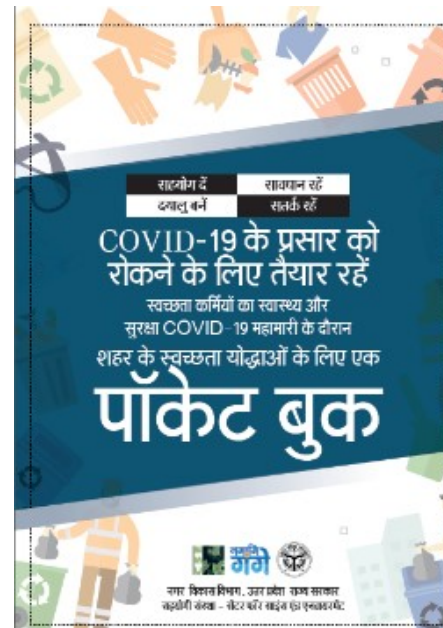
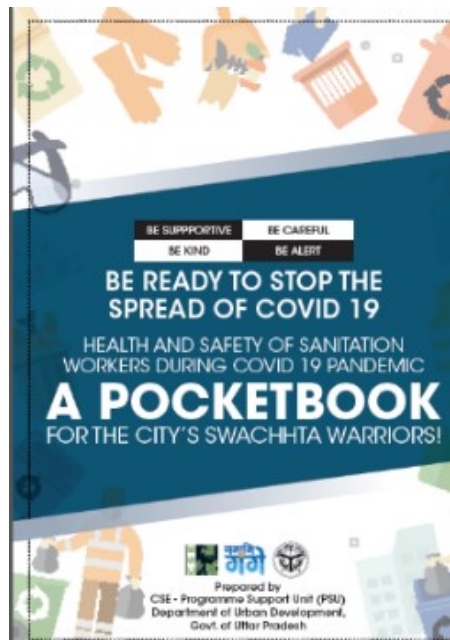
Support for health and safety of workers during COVID-19



Pocket Book for Sanitation Workers

A guide to Sanitary Inspectors in cities to ensure Health and Safety of Sanitation Workers during COVID-19

5000 copies printed and are being distributed to all the ULBs of UP



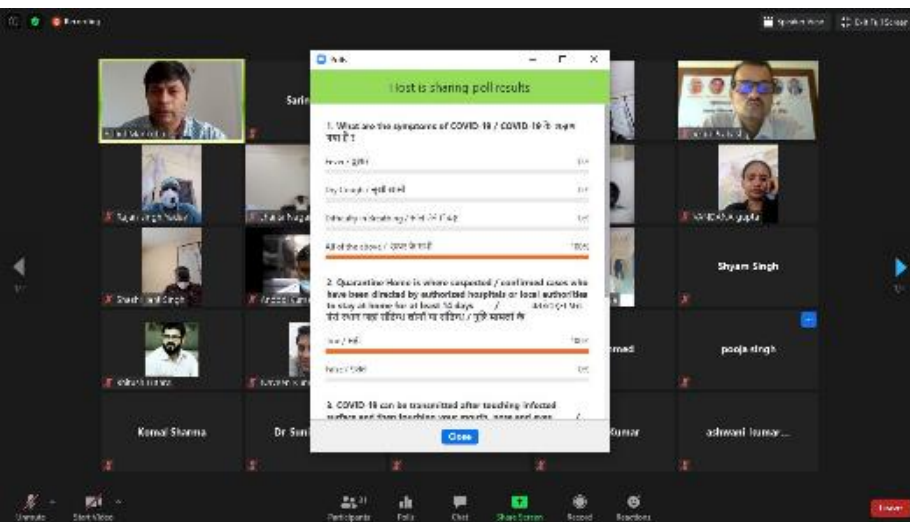
Training of Sanitation Workers COVID-19

2 no. State Level Training for Sanitary Inspectors (~30 SIs trained through virtual trainings)

- Lucknow, Bijnor and Chunar
- Prayagraj, Jhansi, Agra, Unnao, Gangaghat and Lakhimpur

Support for field level orientation of Sanitation Workers:

- 4 session in Bijnor, 6 in Chunar and 5 in Lucknow



Covid Awareness Drive Bijnor, Chunar and Lucknow



Over 2500 kids participated in Painting and Slogan writing competition

Wall paintings in low income settlements



Awareness generation around COVID-19 among women by CSTF members



Audio recording played every morning through mobile vans

Multilingual IEC collaterals for supporting COVID-19 response



Repository of COVID-19: Online Resources



- **Advisories and Guidelines Issued**
- **Best Management Practices during COVID-19**
- **Communication Collaterals**
- **COVID-19 Blogs**

- <https://www.cseindia.org/reorganizing-the-repository-of-covid-19-resources-10103>



Mal-Asur: 'Demon of Defeca' campaign

Creating awareness regarding need for proper Faecal Sludge and Septage Management

Launched by MoHUA on 4th June 2020 and by NMCG on 19th June 2020



Odisha and Telangana have already started implementation of this campaign



Pilot proposed in Chunar (U.P.) – NMCG priority town

Campaign suitable for towns with FS disposal sites available: Unnao, Kanpur, Lucknow, Prayagraj, Jhansi etc

Outreach & Media Coverage

on

Citywide Sanitation through various communication
collateral

CSE OUTREACH ACTIVITIES ON FSSM / CITYWIDE SANITATION

Type of Content	Number	Views
	Completed	
Films/Videos	11	18000
DTE Articles	4	80500
Articles in Annual Publications	2	10000
Articles / interviews / blogs on DTE Web	70	100000
Web – based tools	2	1000
Media - briefing	1	Sensitization of 25 hindi speaking journalists
Total	90	>2 Lakh Views



FSM in Delhi – A case study

(8.3K Views)

15:14



Can faecal sludge be used as an organic soil conditioner

(1.1K Views)

9:36



Faecal Sludge Management in Jhansi

(7.2K Views)

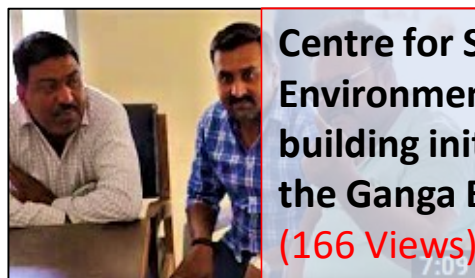
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How to prepare a Shit Flow Diagram

(1.2K Views)

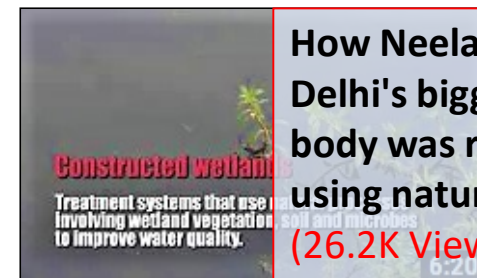
12:52



Centre for Science and Environment's capacity building initiative in the Ganga Basin

(166 Views)

7:09



How Neela Hauz, south Delhi's biggest water body was restored using natural process

(26.2K Views)

6:20

OUTREACH IN UP (PRINT & ELECTRONIC MEDIA)-(100 +)

'In urban U.P., 87% of waste from toilets goes to rivers, farmlands'

Study by Centre for Science and Environment says if more toilets and septic tanks are built in urban areas, the situation will improve.

While urban U.P. has an 80% coverage of toilets, ineffective sanitation systems mean that about 87% of the waste is being dumped in rivers, farmlands or other open spaces. The study by the Centre for Science and Environment (CSE) found that in urban areas, 87% of the waste from toilets goes to rivers, farmlands or other open spaces. The study also found that in rural areas, 95% of the waste from toilets goes to rivers, farmlands or other open spaces.

The study also found that in urban areas, 87% of the waste from toilets goes to rivers, farmlands or other open spaces. The study also found that in rural areas, 95% of the waste from toilets goes to rivers, farmlands or other open spaces.

नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है : मनोज कुमार

गोरखपुर

गोरखपुर में नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है। मनोज कुमार ने बताया कि नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है। मनोज कुमार ने बताया कि नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है। मनोज कुमार ने बताया कि नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है।

यूपी जल ही ओडीएफ

मुख्य सचिव

कार्यशाला

नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है : मनोज कुमार

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'सीवेज के अपशिष्ट को कारोबार जोड़ें तब होगी नदियों की सफाई'

■ एनबीटी, लखनऊ : घरेलू टैको से निकलने वाले मल-मूत्र आर्बिष्ट का बीबीसी (बायोकिमिकल ऑक्सीजन डिमांड) 1000-20000 एमएलडी होता है। जो नदियों के सिमान से काफी हानिकारक है, लेकिन इसके खेतों में इस्तेमाल से फसल काफी अच्छी होती है।

गोरखपुर

गोरखपुर में नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है। मनोज कुमार ने बताया कि नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है। मनोज कुमार ने बताया कि नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है।

राष्ट्रीय सहारा

प्रदेश के शहरों में सीवर प्रबंधन की हालत खस्ता

गोरखपुर

गोरखपुर में नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है। मनोज कुमार ने बताया कि नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है। मनोज कुमार ने बताया कि नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है।

सांध्य दैनिक

PM

गोरखपुर

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नगरीय स्वच्छता कार्य में लाई जा रही है

गोरखपुर

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Radiance MEDIA GROUP

UP takes initiative and sends off and Septage Management plants in Odisha

UP Government is planning 31 effective Faecal Sludge and Septage support from CSE.

The state government has taken up to Faecal Sludge and Septage Management plants in Odisha.

The Exposure Visit for 'Planning and Implementation of Faecal Sludge and Septage Management' (19-20 December) by CSE in collaboration with Odisha Water Supply Odisha has successfully developed policies and implemented best management practices. This offered a great learning experience for Uttar Pradesh that its Participants were provided the opportunity to witness and gain exposure to Odisha.

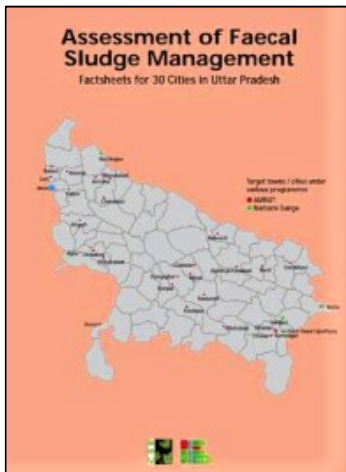
The programme was inaugurated by Prasanta Kumar Mohapatra, Project Director.

ऑडिशा में सेप्टेज प्रबंधन के गुरु सीखेंगे उत्तर प्रदेश के अधिकारी

यूपी जल निगम के माध्यम से 31 शहरों में फिकल स्लज ट्रीटमेंट प्लांट्स (एफएसटीपी) की स्थापना और 21 शहरों में एसटीपी में फिकल कीचड़ के सह-उपचार के लिए निविदाएं आमंत्रित की हैं।

गोरखपुर

गोरखपुर में नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है। मनोज कुमार ने बताया कि नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है। मनोज कुमार ने बताया कि नगरीय स्वच्छता का कार्य अभियान के रूप में जारी है।



**Factsheets and analysis
of Sanitation chain in
30 cities of Uttar
Pradesh**

150 Hard Copies
3000 Downloads

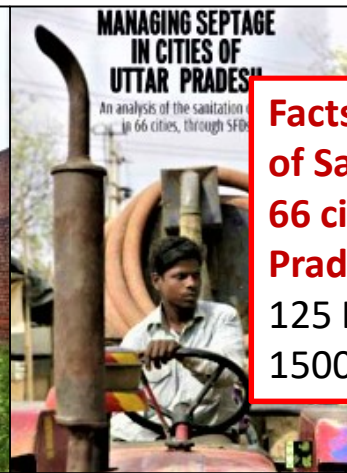
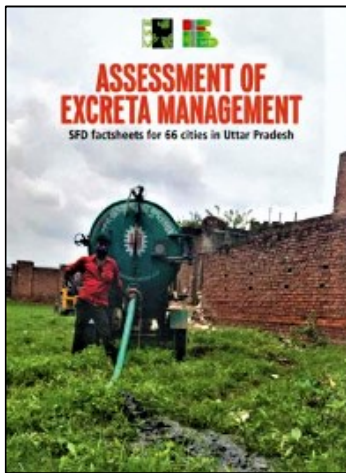
**Practitioner's Guide for
FSSM (Eng. + Hindi)**

1000+ Hard Copies
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**Factsheets, reports,
Guidelines prepared by CSE
for FSSM**

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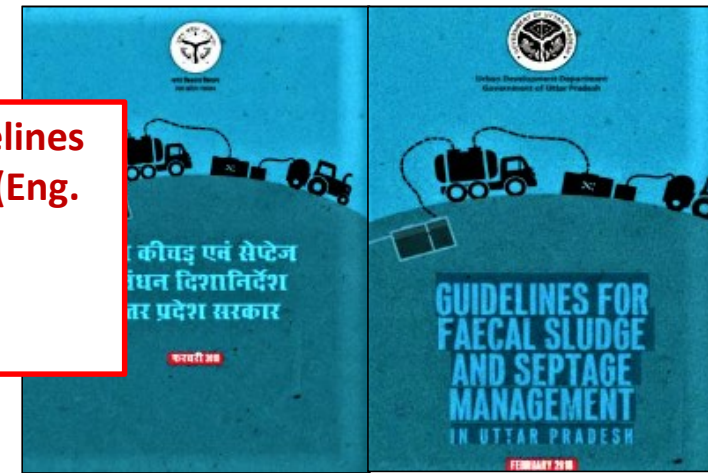


**Factsheets and analysis
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**Draft FSSM Guidelines
of Uttar Pradesh (Eng.
+ Hindi)**

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2000 Downloads



Website / Page : CSE – PSU & TSU in Uttar Pradesh



Links to the page available from following pages:

NMCG: <https://nmcg.nic.in/index.aspx>

AMRUT – U.P.: <http://www.amrutup.in/>

SMCG – U.P.: <http://smcg-up.org/>

Directorate of Local Bodies: <https://localbodies.up.nic.in/>



<https://www.cseindia.org/page/programme-support-for-fssm-in-uttar-pradesh>
<https://www.cseindia.org/page/technical-support-for-fssm-in-bijnor-uttar-pradesh>
<https://www.cseindia.org/page/technical-support-for-fssm-in-chunar-uttar-pradesh>

CITY LEVEL INTERVENTIONS : 2019-20

Focus City (one) – Bijnor

(Focus on CSP Implementation)

- Licensing of Desludgers
- Technical support for the implementation of co-treatment/co-composting at STP of Bijnor
- On-going Support for implementation of city sanitation plan in Bijnor
- Tech support for pilot DWWTs.
- Training for Sanitation Workers.
- IEC campaign for COVID-19 awareness and effective FSSM

Focus City (two) – Chunar

(Focus on FSSM)

- Technical Support for GPS tracking of Emptying and Transportation of Faecal Sludge
- On-going support for implementation of city level FSSM guidelines including bye-laws.
- Technical support for implementation of FSTP.
- Training for Sanitation Workers.
- IEC campaign for COVID-19 awareness and effective FSSM

Action Plan 2020-21:

Research / Technical Support

1. Planning and designing for Co-composting of FSS and MSW in Chunar / Bijnor
2. **Business model for the implementation** of short term CSP strategies for citywide sanitation solutions in Bijnor
3. Rapid City Sanitation Plan for Chunar
4. **Standard operating procedure for FSTP in Chunar**
5. **Analysis of Excreta Management in Ganga Basin**
6. **Co-treatment in Ganga Basin (possible topic)**

Capacity Building

- **Shit Flow Diagram**
- **City Sanitation Planning**
- **Faecal Sludge and Septage Management including Co-treatment**
- **Decentralised Wastewater Management**

Thank You

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Lucknow

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Tel: 011-40616000